CLAIMS

1. Method to regulate a circulating air and/or intake air portion (V_s, V_o) in a passenger compartment of a vehicle, in particular a motor vehicle, with a sensor for detecting hazardous gas concentrations in the passenger compartment and for supplying a triggering signal (l_{CO2}) of a control unit for the circulating air and/or intake air portion (V_s, V_o) in a passenger compartment, characterized in that the sensor is a temperature-compensated sensor, whereby, in addition to the hazardous gas concentration measured by the sensor, the temperature (l_t) measured by the sensor for temperature compensation of the sensor for detecting the hazardous gas concentration is used to regulate the circulating air and/or intake air portion (V_s, V_o) in the passenger compartment.

2. Method according to Claim 1, characterized in that the control unit for the circulating air and/or intake air portion (V_s, V_o) induces the supply of the passenger compartment in an alternating manner with either exclusively circulating air or exclusively intake air as a function of exceeding or falling short of a hazardous gas concentration threshold value (CL).

3. Method according to Claim 1, characterized in that the control unit for the circulating air and/or intake air portion controls the size of the circulating air portion (V_s) in the passenger compartment of the vehicle.

4. Method according to Claim 3, characterized in that the size of the circulating air portion (V_s) in the passenger compartment controlled by the control unit moves in a pre-definable range of a tolerable hazardous gas concentration in the passenger compartment.

5. Method according to one of the preceding claims, characterized in that the control unit for the circulating air and/or intake air portion (V_s, V_o) increases the circulating air portion (V_s) in the passenger compartment when there is an increase in the outside temperature of the passenger compartment.

6. Method according to one of the preceding claims, characterized in that the control unit for the circulating air and/or intake air portion (V_s, V_o) is a part of a cooling/heating device.

7. Method according to one of the preceding claims, characterized in that the sensor for detecting hazardous gas concentrations detects the carbon dioxide concentration in the passenger compartment.

8. Method according to one of the preceding claims, characterized in that the hazardous gas concentration threshold value in the passenger compartment is selected at 0.2% by volume CO_2.

9. Method according to one of the preceding claims, characterized in that the control unit for the circulating air and/or intake air portion (V_s, V_o) adjusts the circulating air portion (V_s) in the passenger compartment to approx. 80% when a person is located in the passenger compartment.

10. Method according to one of the preceding claims, characterized in that the sensor for detecting hazardous gas concentrations communicates with the control unit for the circulating air and/or intake air portion via an analog or a digital interface.

11. Sensor for executing the method according to one of the preceding claims, characterized in that the CO_2 concentration in the passenger compartment is measured by the sensor via a wavelength-specific weakening of electromagnetic radiation in the infrared range.

12. Sensor according to Claim 11, characterized in that the carbon dioxide concentration is measured by the sensor at wavelengths between 4.2 μm and 4.3 μm and a reference wavelength between 3.8 μm and 4.0 μm.

13. Sensor according to Claim 11 or 12, characterized in that the sensor for detecting hazardous gas concentrations in the passenger compartment and the sensor for temperature compensation form a structural unit.